

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

### 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

### <u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Mr. Richard A. Young, Director Department of Public Works City of Allentown 641 South 10<sup>th</sup> Street Allentown, PA 18103-3173

Re: Administrative Order CWA-03-2009-0313DN

Dear Mr. Young:

The United States Environmental Protection Agency Region III (US EPA) received the City of Allentown's (City) February 25, 2014 semi-annual Progress Report on implementation of the above-referenced Administrative Order (AO) and its responses to the comments made in US EPA's May 13, 2013 and January 14, 2014 letters.

According to Paragraph 20 of the AO, Respondents are required to eliminate the discharges from the sanitary sewer overflows (SSOs) in the collection system by December 31, 2014. In anticipation of the deadline of the AO, US EPA will be contacting you in order to schedule a meeting to take place in late summer 2014 between the City, US EPA and the Pennsylvania Department of Environmental Protection (PADEP). At that meeting, the City should be prepared to discuss the work that has been completed to date to comply with the AO, any remaining work needed to comply with the AO.

US EPA looks forward to the City's upcoming semiannual Progress Report and scheduling a time when all parties can meet to discuss finalizing the requirements of the AO. If you have any questions regarding this matter, please contact me at 215-814-2389 or at crane.rebecca@epa.gov.

Sincerely,

Rebecca K. Crane, Environmental Engineer NPDES Enforcement Branch

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cc: Deane Bartlett, US EPA Darryl Fritz, PADEP

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## CERTIFIED MAIL RETURN RECEIPT REQUESTED

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Mr. Richard A. Young, Director Department of Public Works City of Allentown 641 South 10th Street Allentown, Pa. 18103-3173

Re: Administrative Order CWA-03-2009-0313DN

Dear Mr. Young:

The Environmental Protection Agency (EPA) received the July 30, 2013 Progress Report by the City of Allentown (Allentown) on implementation of the above-referenced Administrative Order (AO). The report included a summary of Allentown's progress toward: 1) eliminating inflow; 2) eliminating infiltration; 3) system characterization; 4) cooperative management of flows; and 5) financial information on the funding of operation and maintenance activities. Below are EPA's comments on Allentown's submittal.

EPA reminds Allentown that in order to comply with the AO, Progress Reports must include all of the information requested below. This information, as well as all information requested in EPA's comment letter dated May 15, 2013 must be addressed in the next Progress Report.

### 1. Progress Toward Eliminating Inflow

Regarding its sanitary sewer manhole inspection project, Allentown states that "approximately 500 manhole deficiencies that were not classified as emergency situations have yet to be addressed." Allentown did include a "Repair of Floodplain Manholes" schedule in Appendix A of the current progress report; however it is unclear if all 500 manholes identified for emergency repair are included in Allentown's 2014 timeline. Please provide an update on this effort with a schedule that ensures these emergency situations are addressed prior to the AO deadline.

Allentown has reported that it has cleared debris accumulation from bridge abutments on numerous occasions since 2010. Since debris removal is typically the responsibility of the bridge owner, EPA suggests that Allentown contact the Army Corps of Engineers for additional information regarding this issue.

Allentown has provided the Executive Summary of Phase 1 of its RDII Corrective Action Plan (CAP) and reports that Phase 2, implementation of the SSES work plan, will begin in the second half of 2013. Provide an update on Phase 2 of the RDII CAP in the next Progress Report. Include information detailing whether Allentown's ongoing work to address inflow in its System since the issuance of the

AO, as well as inflow elimination work scheduled throughout 2014, aligns with the specific system improvements identified in Phase 2 for those basins with significant RDII. In addition, please provide a summary of all remaining inflow elimination projects that must be completed prior to the deadline of the AO.

Last, Allentown reports that it has completed design of the Influent Screening Facility Upgrade project at the KIWWTP. Please provide an update on the KIWWTP influent screening facility upgrade project in the next Progress Report.

### 2. Progress Toward Eliminating Infiltration

Similar to EPA's request above, provide an update on Phase 2 of the RDII CAP in the next Progress Report. Include information detailing whether Allentown's ongoing work to address infiltration in its System since the issuance of the AO, as well as infiltration elimination projects scheduled throughout 2014, aligns with those basins identified as having significant RDII. Additionally, identify whether and how the specific system improvements identified for Phase 2 of the RDII CAP impact infiltration elimination projects (i.e. CCTV) that Allentown previously had planned throughout 2014. Finally, provide a summary of all remaining projects required to address infiltration throughout Allentown's System.

### 3. Progress Toward System Characterization

Allentown's future Progress Reports should continue to include a response to all information required in Paragraph 22.c. of the AO.

### 4. Progress Toward Cooperative Management of Flows

Allentown's future Progress Reports should continue to include dates and topics discussed while collaborating among the Respondents.

### 5. Adequate Funding of Operation and Maintenance Activities

Allentown's future Progress Reports should continue to include a response to all information required in Paragraph 22.e. of the AO.

If you have any questions regarding this matter, please contact me at 215-814-2373.

Sincerely,

Allison M. Graham, Environmental Engineer

NPDES Enforcement Branch

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cc: Deane Bartlett, EPA/ORC Darryl Fritz, PADEP Robert Kerchusky, LCA



MAY 15 2013

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Richard A. Young, Director Department of Public Works City of Allentown 641 South 10<sup>th</sup> Street Allentown, Pennsylvania 18103-3173

Re: Administrative Order CWA-03-2009-0313DN

Dear Mr. Young:

The Environmental Protection Agency (EPA) received the January 24, 2013 Progress Report by the City of Allentown (Allentown) on implementation of the above referenced Administrative Order (AO). The report included a summary of Allentown's progress toward: 1) eliminating inflow; 2) eliminating infiltration; 3) system characterization; 4) cooperative management of flows; and 5) financial information on the funding of operation and maintenance activities. Below are EPA's comments on Allentown's submittal.

### 1. Progress Toward Eliminating Inflow

Allentown notes that "930 manholes owned by the signatories and others have been removed from the [manhole insert status] map." Allentown does not state who owns and maintains the manholes owned by "others." In the next progress report, Allentown should identify the manholes owned by "others" and explain how these presumably privately owned manholes are being inspected and their defects addressed.

In its comments regarding the last semi-annual progress report, EPA noted that Allentown's "Sanitary Manhole Insert Status Map" shows that many of the manholes located along the Lehigh River and Jordan Creek had not yet had inserts installed and requested that Allentown explain its strategy for addressing these manholes. In this report, Allentown notes that "in actuality, Allentown has been inspecting the manholes on these trunk lines for a number of years and has found that many have bolted-gasketed covers with no pick holes, and therefore do not require inserts. In fact, bolted-gasketed covers are the preferred option for eliminating RDII from the trunk line manholes which become submerged during flood stage of the City's waterways." In Appendix A, Allentown provided a list of these 316 "riparian" manholes that indicates the type of manhole cover currently in place and when that manhole was last inspected.

The City further notes that the information summarized above was omitted from the referenced map due to "communication issues between the different work groups performing tasks under the AO." This information is still not reflected on the attached manhole insert map. EPA suggests that Allentown coordinate its overlapping activities (i.e., manhole inspections and insert installation). Such coordination will typically result in reduced program costs and increased efficiency. In addition, as Allentown notes that bolt-down covers are the preferred way to address manholes subject to surface flooding, it should note which manholes on the referenced Appendix A "riparian" manhole list are subject to surface flooding. For any such manholes not equipped with a bolt-down cover, Allentown should discuss how and when it intends to convert those covers to bolt-down covers, or why such conversion is not necessary. The manhole insert status map should include the manhole cover type information included in the Appendix A "riparian" manhole cover list.

In Appendix A, Allentown presents a list of "Manhole Insert Problems." That list indicates that a number of manholes could not be accessed due to being paved over (6 manholes) or buried (10 manholes). Allentown notes that it is assuming that these 16 manholes should not be experiencing cover-related RDII. Access to manholes is necessary to support both routine O&M and emergency repair activities. In the next progress report, Allentown should explain if it has considered scheduling the excavation and raising of these 16 manholes, and if so, what discussions have been made about accessing these manholes, along with the basis for those discussions.

Allentown has not provided a response indicating that it will ensure that all residential properties are inspected for illegal inflow sources. Both its Residential Rental Unit inspection program and its point of resale inspection program will take many decades to address all properties within the City. In the next progress report, explain how Allentown intends to ensure all residential properties are inspected for illegal inflow sources.

### 2. Progress Toward Eliminating Infiltration

In its comments regarding the prior semi-annual report, EPA required Allentown to ensure that future semi-annual reports "continue to indicate when and how defects identified will be corrected in addition to providing an updated map detailing the location and type of sewer repairs." In Appendix A, the City has provided a map of sewer repairs carried out, and a table listing identified defects that includes the projected date for completion of repairs. In the next progress report, please explain why very little repair work has been carried out on sewers located in riparian zones. In addition, Allentown should indicate whether the table listing yet-to-becompleted sewer repairs includes all identified NASSCO-graded defects. If it does not, Allentown should provide an all-inclusive table that explains why each graded defect not being repaired is not being addressed.

In its comments regarding the prior semi-annual report, EPA requested that the City provide an update on its investigation into its authority to inspect existing laterals on private property. Allentown indicates that it does not believe that it has the authority to inspect laterals on private property without cause; however, it does not provide a clear and definitive opinion regarding this issue. EPA suggests that Allentown should secure a definitive legal opinion

regarding its authority to carry out inspections of laterals on private property.

Allentown notes that "[d]uring the course of its CCTV inspections, the City is able to inspect the lateral connection to the main sewer and to make observations regarding the condition of the lateral, such as "Excessive Clear Flow." In the future, if "Excessive Clear Flow" is observed from the lateral, the appropriate NASSCO code will be used for documentation and a letter will be sent to the property owner." Has the City observed excessive amounts of clear flow from laterals prior to its adoption of NASSCO-compliant CCTV inspection protocols? If so, were letters sent to the owners of those properties? If not, such letters should be sent out, so long as the video documentation of such inspections still exists.

### 3. Progress Toward System Characterization

Allentown notes that "[d]uring the flow monitoring program described above, system information was discovered leading to questions about the hydraulic flow pattern in certain locations. This information and the related questions are presented on a series of 8-1/2" x 11" maps in Appendix B of the Progress Report for Period 2 dated July 27, 2010, beginning with the one titled Legend for maps showing Questions on Hydraulic Pattern. These questions will be addressed through the RDII consultant's hydraulic modeling of the collection system." Allentown should explain in the next progress report if it plans to confirm by physical investigation any alternative flow routing suggested by its modeling.

#### 4. Progress Toward Cooperative Management of Flows

In its comments regarding the last semi-annual report, EPA requested that Allentown provide updated information regarding any determination as to whether revision of the Signatory Service Agreements will be needed, based upon an understanding that a determination would be made around September 2012. Allentown has indicated that it has not yet made this determination. Allentown should provide updated information regarding any determination as to whether revisions of the Signatory Service Agreements will be implemented.

### 5. Adequate Funding of Operation and Maintenance Activities

Allentown has previously indicated that it anticipated the resolution of several signatories' protests of changes to their quarterly sewer bills by 2012. The report indicates that this issue has not been resolved; as a result revenue continues to be impacted. The City should provide an update on the signatories' protests, the likely resolution of the issue, and its impact on revenues going forward.

EPA reminds Allentown that in order to comply with the AO, Progress Reports must include all of the information requested above. If you require any information or assistance regarding this matter, you may contact me at (215) 814-2373.

Sincerely,

Allison M. Graham

**Environmental Engineer** 

NPDES Enforcement Branch

cc: Deane Bartlett, EPA/ORC Darryl Fritz, PADEP





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## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Richard A. Young, Director Department of Public Works City of Allentown 641 South 10<sup>th</sup> Street Allentown, Pennsylvania 18103-3173

Re: Administrative Order CWA-03-2009-0313DN

Dear Mr. Young:

The Environmental Protection Agency (EPA) received the July 28, 2011 Progress Report by the City of Allentown (Allentown) on implementation of the above referenced Administrative Order (AO). The report included a summary of Allentown's progress toward:

1) eliminating inflow; 2) eliminating infiltration; 3) system characterization; 4) cooperative management of flows; and 5) financial information on the funding of operation and maintenance activities. Below are EPA's comments on Allentown's submittal.

### 1. Progress Toward Eliminating Inflow

Allentown identified manholes that cannot presently accept an insert or be accessed to confirm that an insert exists, and identified such manholes for future repair or replacement. Please provide a timeframe for the repair or replacement of such manholes. In addition, future progress reports should continue to provide updates on Allentown's progress on installing manhole inserts.

Accumulation of debris at bridge abutments continues to be a problem. It causes an increase in local flooding and therefore an increase in inflow through manholes in low lying areas. Allentown reports that "several" bridges were cleared of debris in 2009. Most of the remaining worst case blockages occur at seldom used or abandoned railroad bridges. Contractors equipped to remove such debris were brought in during the second half of 2011 to inspect the required work and provide cost proposals. The next Progress Report should provide progress towards the debris removal project.

At this point, Allentown has not identified additional basins (besides Midway Manor) that will be targeted for future Sewer System Evaluation Survey (SSES) and rehabilitation efforts. Allentown states that any additional basins will be identified by the Rainfall Dependent

Infiltration and Inflow (RDII) consultant based on its evaluation of the existing flow and physical data, together with the results of hydraulic modeling of the collection system. In future Progress Reports, indicate additional basins targeted for future SSES and rehabilitation efforts.

Allentown has sent a letter to 56 of the properties identified in the 1978 SSES as possibly having roof leaders connected to the sanitary sewer. There is no indication that Allentown has begun to address the estimated 270 other properties that may have roof leader connections to the sanitary sewer, or the unknown number of sump pumps that may be connected. Other potential sources of inflow, such as piped streams and French drains, are not discussed. Please provide an update on disconnecting these sources of inflow in the next Progress Report.

### 2. Progress Toward Eliminating Infiltration

EPA suggests that Allentown document its CCTV inspections by incorporating the defect ratings in its geographic information system (GIS). The GIS should also identify how each defect was addressed.

It is Allentown's opinion that it doesn't have the authority to inspect laterals on private property (except through the industrial waste ordinance). Therefore, Allentown did not conduct any lateral inspections during the reporting period. Allentown stated that it plans to describe this in more detail in a separate submission to EPA before the end of 2011. As stated in EPA's May 24, 2011 letter, this correspondence should be submitted as soon as possible, as it is a required component of the Progress Report. In the next Progress Report, please explain whether Allentown has considered or conducted "lateral to main connection" inspections.

#### 3. Progress Toward System Characterization

Allentown plans that the firm recently contracted as the RDII Program Manager will utilize the results of all flow monitoring, including the third round, together with development and calibration of a hydraulic model, simulation of additional wet weather events, and review of other information and data, to develop a detailed SSES work plan that will be prioritized on a basin by basin basis. At this point, additional basins have not yet been prioritized and targeted.

The RDII consultant's work is anticipated to last over one year, with completion of a corrective action plan scheduled for mid-2012. The next two or three Progress Reports should identify any additional basins that contribute to the RDII problem, as well as a plan to correct RDII in these basins.

### 4. Progress Toward Cooperative Management of Flows

The Progress Report for Period 1 stated that Allentown plans to explore the need for possible revisions to the Signatory Service Agreements in 2010 after a consultant is engaged. The current Progress Report sets the date to notify EPA of revisions to the Service Agreements as December 31, 2011. In the next Progress Report, provide an update on Allentown's decision on the need to revise Signatory Service Agreements.

### 5. Adequate Funding of Operation and Maintenance Activities

Appendix D of the Progress Report does not include the revenue status report spreadsheets for the Sewer Fund for the period January 1, 2006 through December 31, 2010, or the budget for 2011. It also does not include a running five year summary as stated in the report. The Fund Summary - Sewer Fund (003) sheets (referred to by the City as the Budget Book Sheets) for 2009, 2010 and 2011 and the corresponding Program Budget Resource Requirement sheets are also missing. The Capital Fund Expenditure Detail Reports for SSES Rehabilitation referred to are also missing. The next Progress Report should be corrected, with the missing materials inserted into Appendix D.

EPA would like to remind Allentown that in order to comply with the AO, Progress Reports must include all information requested above. If you have any questions regarding this matter, please contact me at 215-814-2373.

Sincerely.

Allison M. Graham, Environmental Engineer

NPDES Enforcement Branch

cc: Deane Bartlett, EPA/ORC Darryl Fritz, PADEP

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MAY 2 4 2011

### <u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Mr. Richard A. Young, Director Department of Public Works City of Allentown 641 South 10<sup>th</sup> Street Allentown, Pa. 18103-3173

Re: Administrative Order CWA-03-2009-0313DN

Dear Mr. Young:

The Environmental Protection Agency (EPA) received the January 27, 2011 Progress Report by the City of Allentown (Allentown) on implementation of the above referenced Administrative Order (AO). The report included a summary of Allentown's progress toward: 1) eliminating Inflow and Infiltration (I&I); 2) system characterization; and 3) cooperative management of flows, as well as financial information on the funding of operation and maintenance activities. Below are EPA's comments on Allentown's submittals.

#### 1. Progress Toward Eliminating Inflow

For manholes requiring cover inserts, Allentown is in the process of converting paper records into an Access database that will be linked to its Geographic Information System (GIS) system. Upon completion of the project, Allentown will develop a map of manhole inserts and a schedule for installing the remaining manhole inserts. In addition, Allentown may perform future inspections of those manholes located in the floodplain and designated as "private" or "no owner in table." Future progress reports should continue to provide updates on these efforts.

Allentown also plans to hire a consultant to assist in development and implementation of a "Rainfall Dependent Infiltration and Inflow (RDII) Corrective Action Plan." If Allentown selects a consultant by the end of the current reporting period, the next Progress Report should include an update on its schedule, with interim milestones to address storm sewer connections system wide.

Lastly, Allentown states it initiated a sanitary sewer system flow monitoring program to understand the locations and magnitude of RDII entering its system. As a result, Allentown identified Midway Manor as one of 10 original basins for Sewer System Evaluation Survey (SSES) and rehabilitation efforts. Based on results of the sanitary sewer system flow monitoring

program, please indicate in the next Progress Report if additional basins have been targeted for future SSES and rehabilitation efforts.

### 2. Progress Toward Eliminating Infiltration

Allentown states that its closed-circuit television (CCTV) program locates broken pipes and other system problems, and that 18 repairs are scheduled to be completed in 2011. In the next Progress Report, Allentown should provide an update on the repairs completed during the reporting period.

Paragraph 22.b. of the AO also requires Allentown to provide the date, location, and outcome of all lateral inspections, and an inventory of defective laterals connected to the system. Allentown states its response to this section of the AO will be described in more detail through separate correspondence. This correspondence should be submitted as soon as possible, as it is a required component of the Progress Report. After receipt of the correspondence, EPA and Allentown can discuss this requirement in further detail.

### 3. Progress Toward System Characterization

Allentown states that the results of the third round of flow monitoring projected that the volume of RDII was greater based on 2010 data compared to 2008 data, possibly due to dryer conditions in 2008. In the next Progress Report, please explain how Allentown plans to utilize the results of the third round of flow monitoring data and, based on these results, if I&I elimination is anticipated for additional basins.

## 4. Progress Toward Cooperative Management of Flows

EPA has no comments.

### 5. Adequate Funding of Operation and Maintenance Activities

EPA has no comments.

EPA would like to remind Allentown that in order to comply with the AO, Progress Reports must include all information requested above. If you have any questions regarding this matter, please contact me at 215-814-2373.

Sincerely,

Allison M. Graham, Environmental Engineer

NPDES Enforcement Branch

Allison M. Bred

cc: Deane Bartlett, EPA/ORC Darryl Fritz, PADEP